

WHAT IS CLAIMED IS:

1. A compressor assembly comprising:
 - a compressor mechanism, said compressor mechanism defining a working space for compressing a gas;
 - a discharge chamber disposed within said compressor assembly;
 - a barrier element separating said working space from said discharge chamber;
 - a discharge passage extending through said barrier element, said discharge passage having an inlet opening in gaseous communication with said working space and an outlet opening in gaseous communication with said discharge chamber;
 - a recess defined by said barrier element, said recess having first and second portions, said barrier element having a first thickness at said first portion and a second thickness at said second portion wherein said second thickness is greater than said first thickness, said outlet opening disposed in said first portion of said recess;
 - a substantially planar flexible valve member disposed within said recess and sealingly engageable with said outlet opening; and
 - a clamping member, said clamping member securing said valve member to said barrier element in said first portion of said recess, said clamping member secured to said barrier element in said second portion of said recess.
2. The compressor assembly of claim 1 wherein said clamping member has first and second bearing surfaces and a central span portion disposed therebetween, said first bearing surface engaged with said barrier element in said second portion of said recess, said second bearing surface engaged with said valve member, and said central span portion being spaced from said barrier element.
3. The compressor assembly of claim 2 further comprising a fastener securing said clamping member to said barrier element, said fastener engaging said central span portion of said clamping member.
4. The compressor assembly of claim 1 wherein said compressor mechanism comprises mutually engaged first and second scroll members, each of said scroll members having a base plate and a spiral wrap extending therefrom, said barrier element being defined by one of said base plates.
5. The compressor assembly of claim 1 wherein said valve member has a length and a width, said length being substantially greater than said width, said width of said valve member being greater than a corresponding dimension of said outlet opening, said valve member having a lengthwise axis wherein said clamping member engages said valve

member proximate a first axial end of said valve member, said valve member sealingly engageable with said outlet opening proximate a second axial end of said valve member; said recess including sidewalls limiting movement of said valve member perpendicular to said lengthwise axis wherein said valve member remains sealingly engageable with said outlet opening when said valve member is displaced perpendicular to said lengthwise axis and engaged with one of said sidewalls.

6. A compressor assembly comprising:

a compressor mechanism, said compressor mechanism defining a working space for compressing a gas;

a discharge chamber disposed within said compressor assembly;

a barrier element separating said working space from said discharge chamber;

a discharge passage extending through said barrier element and having an inlet opening in gaseous communication with said working space and an outlet opening in gaseous communication with said discharge chamber said barrier element defining a first thickness at said inlet and outlet openings;

a recess defined by said barrier element, said outlet opening disposed in said recess;

a substantially planar flexible valve member sealingly engageable with said outlet opening;

a clamping member having first and second bearing surfaces and a central span portion disposed therebetween, said first bearing surface engaged with said barrier element, said second bearing surface securing said valve member against said barrier element and said central span portion spaced from said barrier element; and

a fastener securing said clamping member to said barrier element, said fastener engaging said clamping member at said central span portion and engaging said barrier member at a location wherein said barrier element has a second thickness, said second thickness being greater than said first thickness.

7. The compressor assembly of claim 6 wherein said compressor mechanism comprises mutually engaged first and second scroll members, each of said scroll members having a base plate and a spiral wrap extending therefrom, said barrier element being defined by one of said base plates.

8. The compressor assembly of claim 6 wherein said valve member has a length and a width, said length being substantially greater than said width, said width of said valve member being greater than a corresponding dimension of said outlet opening, said

valve member having a lengthwise axis wherein said clamping member engages said valve member proximate a first axial end of said valve member, said valve member sealingly engageable with said outlet opening proximate a second axial end of said valve member; said recess including sidewalls limiting movement of said valve member perpendicular to said lengthwise axis wherein said valve member remains sealingly engageable with said outlet opening when said valve member is displaced perpendicular to said lengthwise axis and engaged with one of said sidewalls.

9. A scroll compressor comprising:

a first scroll member having a first base plate with a front face and an opposite rear face and a first spiral wrap extending from said front face of said first base plate;

a second scroll member having a second base plate and a second spiral wrap extending from said second base plate; said first and second scroll members positioned with said first and second wraps in mutual engagement, said first and second scroll members relatively moveably engaged wherein relative movement of said scroll members compresses a gas in a working space defined by and disposed between said first and second scroll members;

a discharge chamber disposed within said compressor;

a discharge passage extending through said first base plate at a first location wherein said first base plate has a first thickness, said discharge passage having an inlet opening in said front face in gaseous communication with said working space and an outlet opening in said rear face in gaseous communication with said discharge chamber;

a recess defined by said rear face of said first base plate, said outlet opening disposed within said recess;

a substantially planar flexible valve member disposed within said recess and sealingly engageable with said outlet opening; and

a clamping member disposed within said recess and having first and second bearing surfaces and a central span portion disposed therebetween, said first bearing surface engaged with said rear face and said second bearing surface securing said flexible valve member against said rear face, said central span portion spaced from said rear face, said clamping member attached to said first base plate at a second location wherein said first base plate has a second thickness greater than said first thickness.

10. The compressor of claim 9 wherein said clamping member is a substantially C-shaped member attached to said first base plate by a fastener extending

through an aperture in said central span portion and engaging said first base plate at said second location.

11. The compressor of claim 9 further comprising a valve retaining member disposed adjacent said valve member and limiting movement of said valve member away from said outlet opening.

12. The compressor of claim 9 wherein said valve member has a length and a width, said length being substantially greater than said width, said width of said valve member being greater than a corresponding dimension of said outlet opening, said valve member having a lengthwise axis wherein said clamping member engages said valve member proximate a first axial end of said valve member, said valve member sealingly engageable with said outlet opening proximate a second axial end of said valve member; said recess including sidewalls limiting movement of said valve member perpendicular to said lengthwise axis wherein said valve member remains sealingly engageable with said outlet opening when said valve member is displaced perpendicular to said lengthwise axis and engaged with one of said sidewalls.

13. The compressor of claim 9 wherein said outlet opening has a generally circular configuration and said valve member has a width and a length wherein said length is substantially greater than said width, said width of said valve member at said outlet opening being greater than said diameter of said outlet opening.

14. The compressor of claim 9 wherein said valve member includes an opening and said clamp includes a recess having an integral projection therein, said valve member being partially disposed within said recess and said projection being disposed within said opening.

15. The compressor of claim 9 wherein said clamp includes a recess and said valve member is partially disposed within said recess.

16. The compressor of claim 15 further comprising a retaining member disposed adjacent said valve member and limiting movement of said valve member away from said outlet opening, said retaining member partially disposed within said recess.

17. The compressor of claim 16 wherein said clamp directly engages said retaining member and said retaining member is directly engaged with said valve member.